

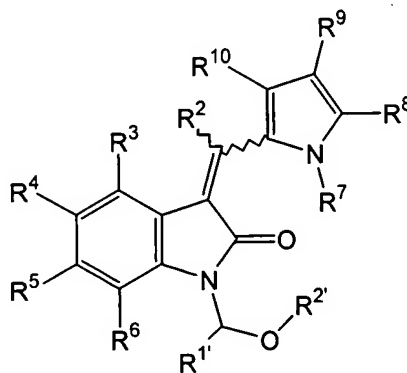
Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-48 (cancelled)

49. (previously presented) A compound of the formula (I):



wherein:

R^2 is hydrogen;

R^3 , R^4 , R^5 and R^6 are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, mercapto, alkylthio, arylthio, sulfinyl, sulfonyl, S-sulfonamido, N-sulfonamido, trihalomethane-sulfonamido, carbonyl, C-carboxy, O-carboxy, C-amido, N-amido, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, amino and $-NR^{11}R^{12}$ where R^{11} and R^{12} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, acetyl, sulfonyl, and trifluoromethanesulfonyl, or R^{11} and R^{12} together with the nitrogen atom to which they are attached combine to form a five- or six-membered heteroalicyclic ring provided that at least two of R^3 , R^4 , R^5 and R^6 are hydrogen; or

R^3 and R^4 , R^4 and R^5 , or R^5 and R^6 combine to form a six-membered aryl ring, a methylenedioxy or an ethylenedioxy group;

R^7 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, carbonyl, acetyl, C-amido, C-thioamido, amidino, C-carboxy, O-carboxy, sulfonyl and trihalomethane-sulfonyl;

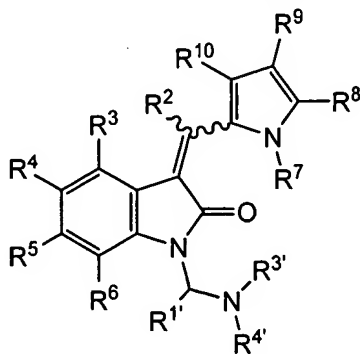
R^8 and R^{10} are unsubstituted lower alkyl;

R^9 is 2-(dimethylaminoethyl)aminocarbonyl, 2-(diethylaminoethyl)aminocarbonyl, 2-(pyrrolidin-1-ylethyl)aminocarbonyl, or 2-(morpholin-4-ylethyl)aminocarbonyl;

R^{11} is hydrogen or alkyl; and

R^{12} is hydrogen, alkyl, aralkyl, acyl or $-P(O)(OR)(OR')$ where R and R' are independently selected from the group consisting of hydrogen, alkyl, aralkyl or aryl; or a pharmaceutically acceptable salt thereof.

50. (previously presented) The compound of claim 49, wherein R⁸ and R¹⁰ are each independently methyl.
51. (previously presented) The compound of claim 49, wherein R^{2'} is hydrogen, acyl or -P(O)(OR)(OR') and R⁷ is hydrogen;
R³ is hydrogen or lower unsubstituted alkyl;
R⁴ is selected from the group consisting of hydrogen, halogen, aryl and S-sulfonamido;
R⁵ is selected from the group consisting of hydrogen, lower alkyl, lower alkoxy, aryl, and heteroaryl; and
R⁶ is hydrogen.
52. (previously presented) The compound of claim 51, wherein R³ is hydrogen or methyl.
53. (previously presented) The compound of claim 51, wherein R⁴ is hydrogen, chloro, fluoro, bromo or phenyl.
54. (previously presented) The compound of claim 53, wherein R⁴ is hydrogen or fluoro.
55. (previously presented) The compound of claim 51, wherein R⁵ is hydrogen, methyl, ethyl, methoxy, phenyl or pyridyl.
56. (previously presented) The compound of claim 55, wherein R⁵ is hydrogen.
57. (previously presented) The compound of claim 49, wherein R^{2'} is hydrogen.
58. (previously presented) The compound of claim 49, wherein R^{2'} is -P(O)(OR)(OR').
59. (previously presented) The compound of claim 49, wherein R^{2'} is acyl.
60. (previously presented) A compound of the formula (II):



wherein:

R² is hydrogen;
R³, R⁴, R⁵ and R⁶ are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, mercapto, alkylthio, arylthio, sulfinyl, sulfonyl, S-sulfonamido, N-sulfonamido, trihalomethane-sulfonamido, carbonyl, C-carboxy, O-carboxy, C-amido, N-amido, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, amino and -NR¹¹R¹² where R¹¹ and R¹² are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, acetyl, sulfonyl, and trifluoromethanesulfonyl, or R¹¹ and R¹² together with the nitrogen

atom to which they are attached combine to form a five- or six-membered heteroalicyclic ring provided that at least two of R^3 , R^4 , R^5 and R^6 are hydrogen; or

R^3 and R^4 , R^4 and R^5 , or R^5 and R^6 combine to form a six-membered aryl ring, a methylenedioxy or an ethylenedioxy group;

R^7 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, carbonyl, acetyl, C-amido, C-thioamido, amidino, C-carboxy, O-carboxy, sulfonyl and trihalomethane-sulfonyl;

R^8 and R^{10} are independently unsubstituted lower alkyl;

R^9 is $-C(=O)NHR^{13}$ wherein R^{13} is lower alkyl substituted with amino or heteroalicyclic and optionally substituted with hydroxy;

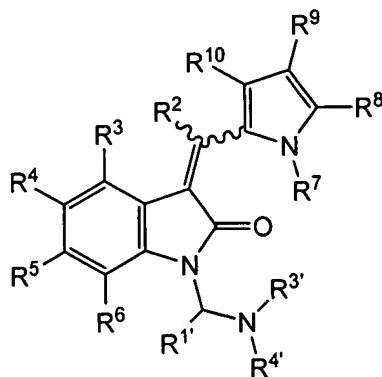
$R^{1'}$ is hydrogen or alkyl; and

R^3 and R^4 are independently alkyl or together with the nitrogen atom to which they are attached combine to form a heteroalicyclic ring or a heteroaryl ring; or a pharmaceutically acceptable salt thereof.

61. (previously presented) The compound of claim 60, wherein R^9 is (2-diethylaminoethyl)-aminocarbonyl, (2-ethylaminoethyl)aminocarbonyl, 2-(pyrrolidin-1-ylethyl)-aminocarbonyl, 3-(morpholin-4-yl)propyl-aminocarbonyl, or 3-(morpholin-4-yl)-2-hydroxypropylaminocarbonyl.

62. (previously presented) The compound of claim 61, wherein R^9 is (2-diethylaminoethyl)aminocarbonyl, or (2-ethylaminoethyl)-aminocarbonyl.

63. (previously presented) A compound of the formula II:



wherein:

R^3 is hydrogen or lower unsubstituted alkyl;

R^4 is selected from the group consisting of hydrogen, halogen, aryl and S-sulfonamido;

R^5 is selected from the group consisting of hydrogen, lower alkyl, lower alkoxy, aryl, and heteroaryl;

R^6 is hydrogen;

R^7 is hydrogen;

$R^{1'}$ is hydrogen or methyl

R^8 and R^{10} are independently unsubstituted lower alkyl;

R^9 is $-C(=O)NHR^{13}$ wherein R^{13} is lower alkyl substituted with amino or heteroalicyclic and optionally substituted with hydroxy; and

R^3 and R^4 are independently lower alkyl optionally substituted with hydroxy, or

R^3 and R^4 together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl, 2-(S)-hydroxymethylpyrrolidin-1-yl, 2-(S)-carboxy-pyrrolidin-1-yl, piperazin-1-yl, or 4-methylpiperazin-1-yl group; or

R^3 and R^4 together with the nitrogen atom to which they are attached form a heteroaryl ring; or

a pharmaceutically acceptable salt thereof.

64. (previously presented) The compound of claim 63, wherein R^3 and R^4 are lower alkyl optionally substituted with hydroxyl.

65. (previously presented) The compound of claim 63, wherein R^3 and R^4 together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl, 2-(S)-hydroxymethylpyrrolidin-1-yl, 2-(S)-carboxy-pyrrolidin-1-yl, piperazin-1-yl, or a 4-methylpiperazin-1-yl group.

66. (previously presented) The compound of claim 65, wherein R^3 and R^4 together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl group.

67. (previously presented) The compound of claim 63, wherein R^3 and R^4 together with the nitrogen atom to which they are attached form a pyrro-1-yl, pyridin-1-yl, oxazol-3-yl, isoxazol-2-yl, pyrazin-1-yl, pyradizin-1-yl, quinolin-1-yl, or a imidazol-1-yl heteroaryl ring.

68. (previously presented) The compound of claim 67, wherein R^3 and R^4 together with the nitrogen atom to which they are attached form a pyridin-1-yl ring.

69. (previously presented) The compound of claim 63, wherein R^3 is hydrogen or methyl.

70. (previously presented) The compound of claim 63, wherein R^4 is hydrogen, chloro, fluoro, bromo or phenyl.

71. (previously presented) The compound of claim 70, wherein R^4 is hydrogen or fluoro.

72. (previously presented) The compound of claim 63, wherein R^5 is hydrogen, methyl, ethyl, methoxy, phenyl or pyridyl.

73. (previously presented) The compound of claim 72, wherein R^5 is hydrogen.

74. (previously presented) The compound of claim 63, wherein:

R^1 , R^3 , R^5 , R^6 , and R^7 are hydrogen;

R^4 is halo;

R^8 and R^{10} are unsubstituted lower alkyl;

R^9 is $-C(=O)NHR^{13}$ wherein R^{13} is lower alkyl substituted with amino or heteroalicyclic and optionally substituted with hydroxyl; and

R^3 and R^4 together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl, 2-(S)-hydroxymethylpyrrolidin-1-yl, 2-(S)-carboxypyrrolidin-1-yl, piperazin-1-yl, or a 4-methylpiperazin-1-yl group.

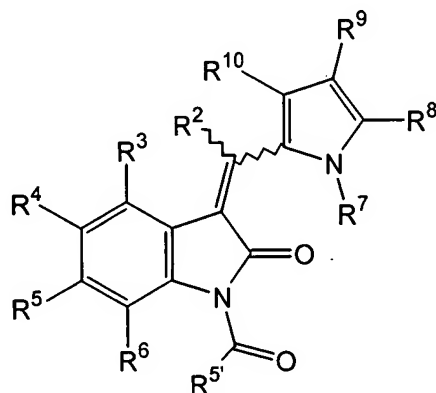
75. (previously presented) The compound of claim 74, wherein R⁹ is (2-diethylaminoethyl)-aminocarbonyl, (2-ethylaminoethyl)-aminocarbonyl, 2-(pyrrolidin-1-ylethyl)aminocarbonyl, 3-(morpholin-4-yl)propyl-aminocarbonyl, 3-(morpholin-4-yl)-2-hydroxypropylaminocarbonyl, particularly (2-diethylaminoethyl)aminocarbonyl, or (2-ethylaminoethyl)-aminocarbonyl.

76. (previously presented) The compound of claim 75, wherein R⁹ is (2-diethylaminoethyl)aminocarbonyl, or (2-ethylaminoethyl)-aminocarbonyl.

77. (previously presented) The compound of claim 75, wherein R³ and R⁴ together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl group.

78. (previously presented) The compound of claim 63, which is (3Z)-3-[[3,5-dimethyl-4-(2-diethylaminoethylaminocarbonyl)-1H-pyrrol-2-yl]-methylidene]-1-(1-pyrrolidinylmethyl)-1,3-dihydro-2H-indol-2-one; (3Z)-3-[[3,5-dimethyl-4-(2-ethylaminoethylaminocarbonyl)-1H-pyrrol-2-yl]-methylidene]-1-(1-pyrrolidinylmethyl)-1,3-dihydro-2H-indol-2-one; or (3Z)-3-[[3,5-dimethyl-4-(3-morpholin-4-yl-2-hydroxypropylaminocarbonyl)-1H-pyrrol-2-yl]-methylidene]-1-(1-pyrrolidinylmethyl)-1,3-dihydro-2H-indol-2-one.

79. (previously presented) A compound of the formula III:



wherein:

R² is hydrogen;

R³, R⁴, R⁵ and R⁶ are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, mercapto, alkylthio, arylthio, sulfinyl, sulfonyl, S-sulfonamido, N-sulfonamido, trihalomethane-sulfonamido, carbonyl, C-carboxy, O-carboxy, C-amido, N-amido, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, amino and -NR¹¹R¹² where R¹¹ and R¹² are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, acetyl, sulfonyl, and trifluoromethanesulfonyl, or R¹¹ and R¹² together with the nitrogen atom to which they are attached combine to form a five- or six-membered heteroalicyclic ring provided that at least two of R³, R⁴, R⁵ and R⁶ are hydrogen; or

R^3 and R^4 , R^4 and R^5 , or R^5 and R^6 combine to form a six-membered aryl ring, a methylenedioxy or an ethylenedioxy group;

R^7 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, carbonyl, acetyl, C-amido, C-thioamido, amidino, C-carboxy, O-carboxy, sulfonyl and trihalomethane-sulfonyl;

R^8 and R^{10} are unsubstituted lower alkyl;

R^9 is C-amido; and

R^5 is alkyl; or

a pharmaceutically acceptable salt thereof.

80. (previously presented) The compound of claim 79, wherein R^9 is 2-(dimethylaminoethyl) aminocarbonyl, 2-(diethylaminoethyl) aminocarbonyl, 2-(pyrrolidin-1-ylethyl)aminocarbonyl, or 2-(morpholin-4-ylethyl)aminocarbonyl.

81. (previously presented) The compound of claim 79, wherein

R^3 is hydrogen or lower unsubstituted alkyl;

R^4 is selected from the group consisting of hydrogen, halogen, aryl and S-sulfonamido;

R^5 is selected from the group consisting of hydrogen, lower alkyl, lower alkoxy, aryl, and heteroaryl; and

R^6 and R^7 are hydrogen.

82. (previously presented) The compound of claim 79, wherein R^3 is hydrogen or methyl.

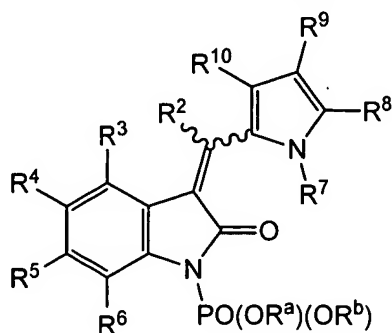
83. (previously presented) The compound of claim 79, wherein R^4 is hydrogen, chloro, fluoro, bromo or phenyl.

84. (previously presented) The compound of claim 83, wherein R^4 is hydrogen or fluoro.

85. (previously presented) The compound of claim 79, wherein R^5 is hydrogen, methyl, ethyl, methoxy, phenyl or pyridyl.

86. (previously presented) The compound of claim 85, wherein R^5 is hydrogen.

87. (previously presented) A compound of the formula IV:



wherein:

R^2 is hydrogen;

R^3 , R^4 , R^5 and R^6 are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy,

aryloxy, mercapto, alkylthio, arylthio, sulfinyl, sulfonyl, S-sulfonamido, N-sulfonamido, trihalomethane-sulfonamido, carbonyl, C-carboxy, O-carboxy, C-amido, N-amido, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, amino and $-NR^{11}R^{12}$ where R^{11} and R^{12} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, acetyl, sulfonyl, and trifluoromethanesulfonyl or R^{11} and R^{12} together with the nitrogen atom to which they are attached combine to form a five- or six-membered heteroalicyclic ring provided that at least two of R^3 , R^4 , R^5 and R^6 are hydrogen; or

R^3 and R^4 , R^4 and R^5 , or R^5 and R^6 combine to form a six-membered aryl ring, a methylenedioxy or an ethylenedioxy group;

R^7 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, carbonyl, acetyl, C-amido, C-thioamido, amidino, C-carboxy, O-carboxy, sulfonyl and trihalomethane-sulfonyl;

R^8 and R^{10} are unsubstituted lower alkyl;

R^9 is C-amido; and

R^a and R^b are independently selected from hydrogen or alkyl; or a pharmaceutically acceptable salt thereof.

88. (previously presented) The compound of claim 87, wherein R^9 is 2-(dimethylaminoethyl) aminocarbonyl, 2-(diethylaminoethyl)aminocarbonyl, 2-(pyrrolidin-1-ylethyl)aminocarbonyl, or 2-(morpholin-4-ylethyl)aminocarbonyl.

89. (previously presented) The compound of claim 87, wherein

R^3 is hydrogen or lower unsubstituted alkyl;

R^4 is selected from the group consisting of hydrogen, halogen, aryl and S-sulfonamido;

R^5 is selected from the group consisting of hydrogen, lower alkyl, lower alkoxy, aryl, and heteroaryl; and

R^6 and R^7 are hydrogen.

90. (previously presented) The compound of claim 87, wherein R^3 is hydrogen or methyl.

91. (previously presented) The compound of claim 87, wherein R^4 is hydrogen, chloro, fluoro, bromo or phenyl.

92. (previously presented) The compound of claim 90, wherein R^4 is hydrogen or fluoro.

93. (previously presented) The compound of claim 87, wherein R^5 is hydrogen, methyl, ethyl, methoxy, phenyl or pyridyl.

94. (previously presented) The compound of claim 93, wherein R^5 is hydrogen.

95. (previously presented) The compound of claim 87, wherein R^a and R^b are hydrogen.

96. (previously presented) A pharmaceutical composition comprising a compound of any one of claims 49, 60, 63, 79 or 87 and a pharmaceutically acceptable carrier.

97. (previously presented) A pharmaceutical composition comprising a compound of claim 78 and a pharmaceutically acceptable carrier.

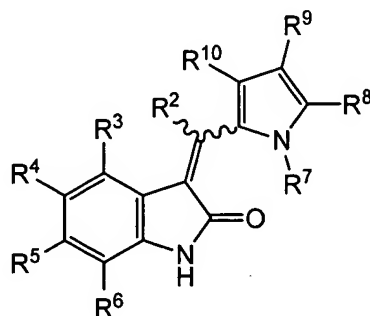
98. (previously presented) The pharmaceutical composition of claim 97, wherein said composition is administered orally.

99. (previously presented) The pharmaceutical composition of 97, wherein said composition is administered parenterally.

Claims 100-106 (cancelled)

107. (previously presented) A method of synthesizing a compound of formula I comprising:

(a) reacting a compound of the formula V:



where $R^3 - R^{10}$ are as defined in claim 49, with an aldehyde of the formula $R^{1'}CHO$, where $R^{1'}$ is as defined in claim 49, in the presence of an organic base, to provide a compound of formula I where R^2 is hydrogen;

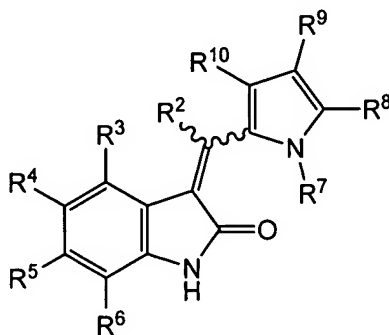
(b) optionally reacting a compound obtained in step (a) above with an alkylating agent, an aralkylating agent, an acylating agent or a phosphorylating agent in the presence of an organic base to provide a compound of formula I where R^2 is alkyl, aralkyl, aryl, acyl or $-P(O)(OR)(OR')$;

(c) optionally removing a protecting group from the product of step (b); and

(d) optionally forming an acid addition salt.

108. (previously presented) A method of synthesizing a compound of formula III comprising:

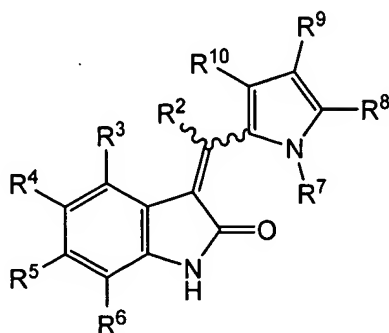
(a) reacting a compound of the formula V:



where $R^3 - R^{10}$ are as defined in claim 79, with an acylating agent of the formula R^5COL , where R^5 is as defined in claim 79 and L is a leaving group, under acylating reaction conditions, in the presence of an organic base;

(b) optionally removing a protecting group from the product of step (b); and

- (c) optionally forming an acid addition salt.
109. (previously presented) A method of synthesizing a compound of formula IV comprising:
- (a) reacting a compound of the formula V:



where $R^3 - R^{10}$ are as defined in claim 87 above, with a phosphorylating agent of the formula $XP(O)(OR^a)(R^b)$, where R^a and R^b are alkyl and X is a leaving group under phosphorylating reaction conditions in the presence of an organic base;

- (b) optionally removing the R^a and R^b groups;
- (c) optionally removing a protecting group from the product of step (b); and
- (d) optionally forming an acid addition or base salt.